

Serial No. 10/647,642

PATENT

CLAIM AMENDMENTS

1 1. (Original) A stent graft prosthesis mounted to a deployment device and
2 adapted to be deployed in a curved lumen, the curved lumen having an inner side
3 and an outer side of the curve, the stent graft prosthesis being temporarily
4 mounted to the deployment device at at least one end of the prosthesis by a
5 retention arrangement, the retention arrangement including a retention of the
6 stent graft prosthesis to the deployment device at a plurality of points of the
7 circumference of the proximal end of the stent graft prosthesis, there being a
8 greater circumferential distance between two adjacent retention points than other
9 of the points, whereby when the deployment device is deployed in the curved
10 lumen the greater circumferential distance is on the inner side of the curve.

1 2. (Original) A stent graft prosthesis mounted to a deployment device as in
2 Claim 1 wherein the retention arrangement includes a fastening to a release
3 mechanism at at least two points of the circumference of the prosthesis whereby
4 a larger and a smaller fold of the graft material is formed.

1 3. (Original) A stent graft prosthesis mounted to a deployment device as in
2 Claim 1 wherein the retention arrangement includes three retention points so that
3 one larger and two smaller folds of the graft material are formed.

1 4. (Original) A stent graft prosthesis mounted to a deployment device as in
2 Claim 1 wherein the retention arrangement provides one larger lobe and at least
3 one smaller lobe of the proximal end of the graft material wherein the larger lobe

- 2 -

BEST AVAILABLE COPY

PATENT

Serial No. 10/647,642

4 is on the inner side of the curve when the deployment device is deployed in the
5 curved lumen.

1 5. (Original) A stent graft prosthesis mounted to a deployment device as in
2 Claim 1 wherein the deployment device includes a guide wire catheter and a
3 trigger wire catheter coaxially around the guide wire catheter with trigger wires
4 passing along the annular space between the guide wire catheter and the trigger
5 wire catheter and exiting through apertures at the retention points and the trigger
6 wires are engaged with the graft material to provide the retention points.

1 6. (Original) A stent graft prosthesis mounted to a deployment device as in
2 Claim 5 wherein the apertures are equally spaced around the trigger wire catheter.

1 7. (Original) A stent graft prosthesis mounted to a deployment device as in
2 Claim 4 wherein the trigger wires are engaged to the graft material by loops of
3 thread-like material.

1 8. (Original) A stent graft prosthesis mounted to a deployment device as in
2 Claim 7 wherein the loops of thread-like material are adapted to remain with the
3 graft material after deployment.

1 9. (Original) A deployment device and stent graft prosthesis temporarily
2 mounted thereto and adapted to be deployed in a curved lumen, the curved
3 lumen having an inner side and an outer side of the curve, the deployment device
4 including a deployment catheter and a release mechanism, the stent graft
5 prosthesis comprising a tube of graft material having a first end and a second end

Serial No. 10/647,642

PATENT

6 and being mounted to the deployment device at at least its first end by a retention
7 arrangement, the retention arrangement including a retention to the deployment
8 device at a plurality of points of the circumference of the proximal end of the stent
9 graft prosthesis, there being a greater circumferential distance between two
10 adjacent retention points than other of the points, and the retention points being
11 provided by the release mechanism being engaged with the graft material,
12 whereby when the deployment device is deployed in the curved lumen the greater
13 circumferential distance is on the inner side of the curve.

1 10. (Currently Amended) A deployment device and stent graft prosthesis
2 temporarily mounted thereto ~~A stent graft prosthesis mounted to a deployment~~
3 ~~device~~ as in Claim 9 wherein the retention arrangement includes a fastening to a
4 release mechanism at at least two points of the circumference of the prosthesis
5 whereby a larger and a smaller fold of the graft material is formed.

1 11. (Currently Amended) A deployment device and stent graft prosthesis
2 temporarily mounted thereto ~~A stent graft prosthesis mounted to a deployment~~
3 ~~device~~ as in Claim 9 wherein the retention arrangement includes three retention
4 points so that one larger and two smaller folds of the graft material are formed.

1 12. (Currently Amended) A deployment device and stent graft prosthesis
2 temporarily mounted thereto ~~A stent graft prosthesis mounted to a deployment~~
3 ~~device~~ as in Claim 9 wherein the retention arrangement provides one larger fold
4 and at least one smaller fold of the proximal end of the graft material wherein the
5 larger fold is on the inner side of the curve when the deployment device is

PATENT

Serial No. 10/647,642

6 deployed in the curved lumen.

1 13. (Currently Amended) A deployment device and stent graft prosthesis
 2 temporarily mounted thereto ~~A stent graft prosthesis mounted to a deployment~~
 3 ~~device~~ as in Claim 9 wherein the deployment catheter includes a guide wire
 4 catheter and a trigger wire catheter coaxially around the guide wire catheter and
 5 the release mechanism includes trigger wires passing along the annular space
 6 between the guide wire catheter and the trigger wire catheter and exiting through
 7 apertures in the trigger wire catheter.

1 14. (Currently Amended) A deployment device and stent graft prosthesis
 2 temporarily mounted thereto ~~A stent graft prosthesis mounted to a deployment~~
 3 ~~device~~ as in Claim 13 wherein the apertures are equally spaced around the trigger
 4 wire catheter.

1 15. (Currently Amended) A deployment device and stent graft prosthesis
 2 temporarily mounted thereto ~~A stent graft prosthesis mounted to a deployment~~
 3 ~~device~~ as in Claim 13 wherein the trigger wires are engaged to the graft material
 4 by loops of thread-like material.

1 16. (Currently Amended) A deployment device and stent graft prosthesis
 2 temporarily mounted thereto ~~A stent graft prosthesis mounted to a deployment~~
 3 ~~device~~ as in Claim 15 wherein the loops of thread-like material are adapted to
 4 remain with the graft material after deployment.

Serial No. 10/647,642

PATENT

1 17. (Currently Amended) A deployment device and stent graft prosthesis
 2 temporarily mounted thereto ~~A stent graft prosthesis mounted to a deployment~~
 3 ~~device~~ as in Claim 9 wherein the stent graft prosthesis includes stents of self
 4 expanding zig zag Z stents and the tube of graft material.

1 18. (Currently Amended) A deployment device and stent graft prosthesis
 2 temporarily mounted thereto ~~A stent graft prosthesis mounted to a deployment~~
 3 ~~device~~ as in Claim 16 wherein the retention is by sutures tied to trigger wires on
 4 the deployment device and around bends of the zig zag Z stents on the stent graft.

1 19. (Currently Amended) A deployment device and stent graft prosthesis
 2 temporarily mounted thereto ~~A stent graft prosthesis mounted to a deployment~~
 3 ~~device~~ as in Claim 14 wherein further retention points are provided along the
 4 length of the stent graft prosthesis such as at the second end of the stent graft
 5 prosthesis.

1 Claims 20 and 21. (Cancelled)

1 22. (Original) A deployment device for deploying a stent graft prosthesis into
 2 a thoracic arch of a patient, the stent graft prosthesis being temporarily mounted
 3 to the deployment device and adapted to be deployed in the thoracic arch, the
 4 thoracic arch having a curved lumen having an inner side and an outer side of the
 5 curve, the stent graft prosthesis being mounted to the deployment device at least
 6 the proximal end of the prosthesis by a retention arrangement, the retention
 7 arrangement including a retention to the deployment device at a plurality of
 8 points of the circumference of the proximal end of the stent graft prosthesis, there

PATENT

Serial No. 10/647,642

9 being a greater circumferential distance between two adjacent retention points
 10 than other of the points, whereby when the deployment device is deployed in the
 11 curved lumen the greater circumferential distance is on the inner side of the
 12 curve.

1 23. (Original) An introducer for introducing a stent graft prosthesis into a
 2 curved lumen of a patient, the introducer including an arrangement for
 3 temporarily fixing the prosthesis to the introducer while it is being introduced into
 4 the lumen, wherein three or more positions on one end of the prosthesis are to
 5 be fixed to the arrangement, wherein the circumferential distance between two
 6 adjacent ones of those positions is greater than the circumferential distance
 7 between other adjacent positions of those positions and wherein the introducer
 8 serves to introduce the prosthesis into the lumen with said two adjacent positions
 9 next to the inner side of the curve of the lumen.

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☒ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.